Summary of Benefit-Cost Analysis of Justice Center and McCaw Performance Hall (Conducted for OSE by SBW Consulting)

Goals

- Estimate life-cycle benefits and costs of achieving "silver LEED" at Justice Center and McCaw Hall
- Provide credible, useful benefit-cost information and feedback for City's Sustainable
 Building Program and other developers/building owners/architects

Methodology

- Gathered information/data from project managers, utilities, design firms, etc.
- Interviewed project managers extensively
- Consulted LEED reference materials, commissioning studies, literature, etc.
- Estimated incremental benefits and costs
 - o distinguished between primary benefits (e.g., energy and water savings) and secondary benefits (e.g., increased productivity)
 - o separated out general fund- vs. utility-borne costs
 - o used very conservative assumptions to calculate productivity benefits

Results

- 43% of LEED points considered standard practice (e.g., meeting new energy code);
 57% represented going "above and beyond" standard practice
- LEED actions included:
 - o @ Justice Center: buffer wall, light shelves, green roof
 - o @ McCaw Hall: improved construction debris recycling, indoor air quality management
 - o @ both: energy efficiency, indoor environmental quality improvements, commissioning

	McCaw Hall	Justice Center	Combined
Cost	\$909,000	\$1,728,000	\$2,637,000
% of Project Budget	0.7%	1.9%	1.2%
Benefits (assuming 25-	\$582,000-\$835,000	\$2,557,000-	\$3,138,000-
year life-cycle)		\$3,708,000	\$4,543,000
Benefit-Cost Ratios			
(@ 2% and 6%			
discount rates)			
Primary benefits only	0.79-1.14	0.77-1.10	0.78-1.11
w/secondary benefits	0.74-1.07	1.93-2.80	1.49-2.16
w/utility incentives	0.64-0.92	1.48-2.15	1.19-1.72

Conclusions

- LEED cost-effective overall for both projects combined
- Cost-effectiveness somewhat lower at McCaw Hall because of lower occupancy rate (and therefore lower productivity benefits)
- Uncertainties in analysis; need to evaluate actual performance of buildings